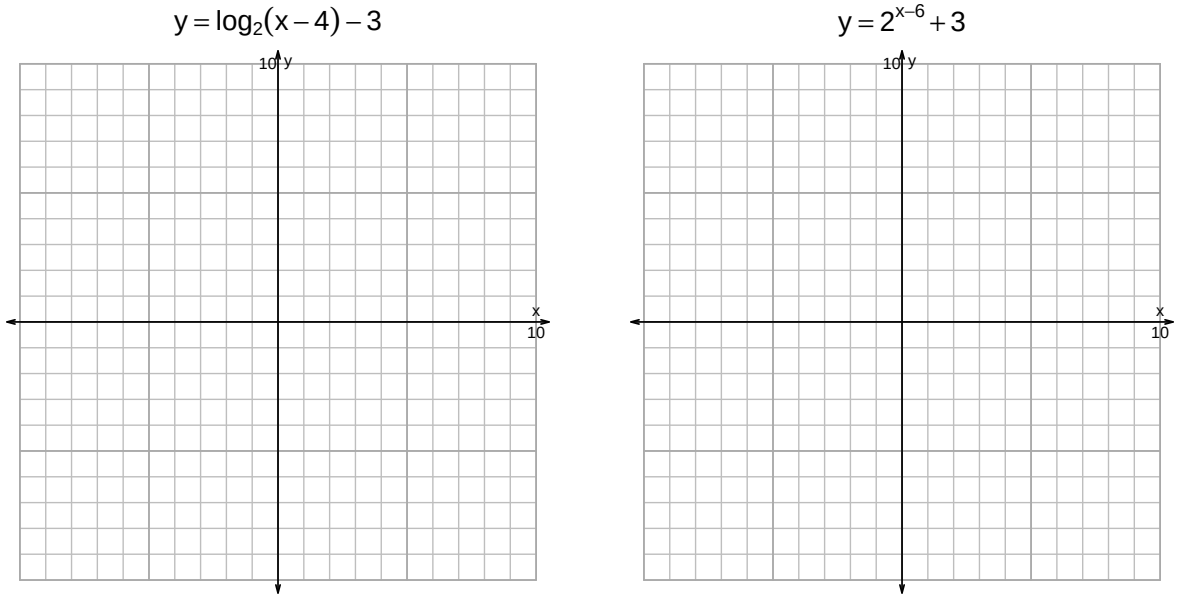
Name: Date:

S18QUIZ: EXP LOG (QUIZ V282)

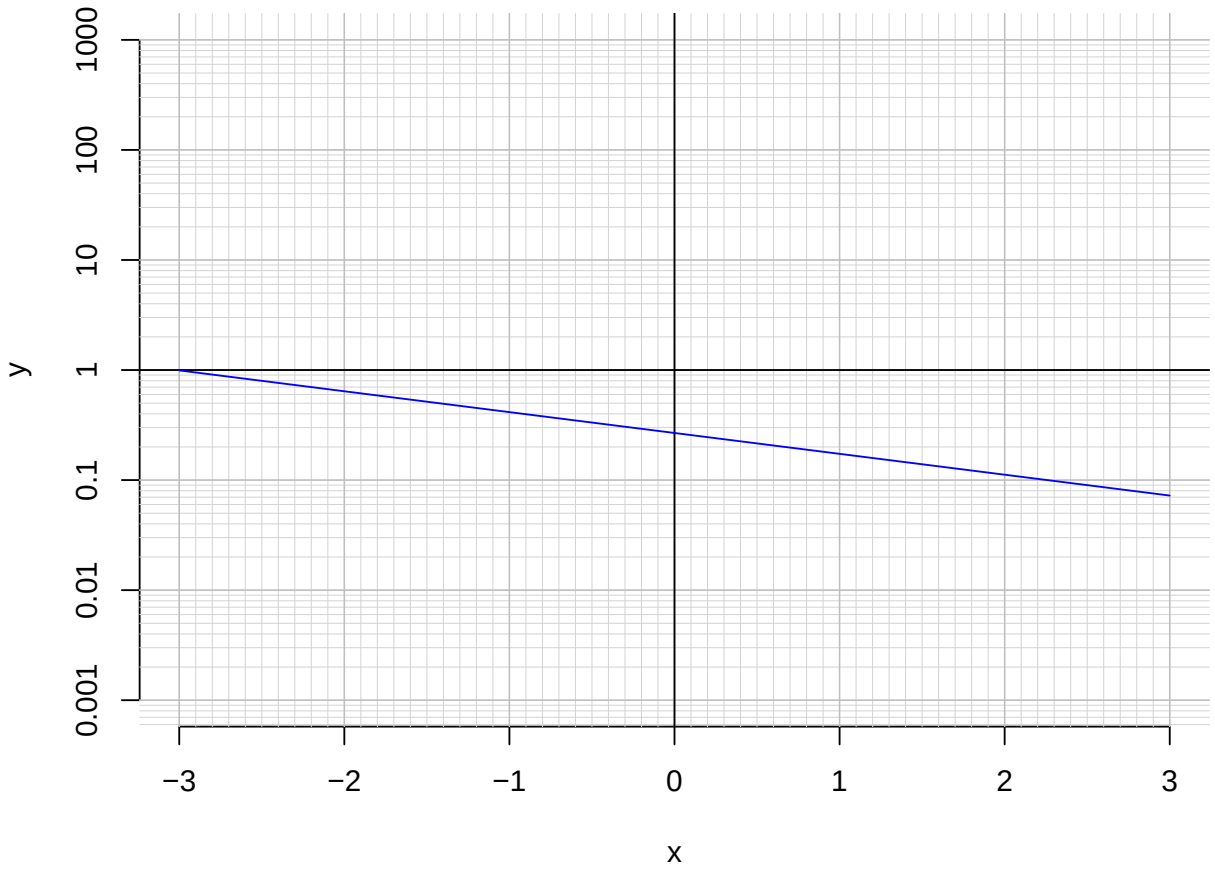
1. Graph $y = \log_2(x-4) - 3$ and $y = 2^{x-6} + 3$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-11 = \left(\frac{-4}{7}\right) \cdot 10^{-3t/5}$$

3. An exponential function $f(x) = 0.268 \cdot e^{-0.436x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(2.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.7)$.